MESA/BOOGIE®

THROTTLE BOX™

Owner's Manual

SAFETY PRECAUTIONS:

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Be sure to use only properly rated power adaptors or universal power supplies (pedal board power supplies) with appropriate attention paid to proper voltage, amperage and ground schemes. Improper voltage/amperage being provided to the pedal may cause poor tone, inconsistent performance, damage to the unit or all of the above. Proper voltage, amperage and grounding specs are supplied at the end of this manual.
- REPLACE THE BOTTOM LID after battery replacement or switch adjustment before the unit is used. Some electronic parts inside are static sensitive and can be damaged from even a small static charge from contact with carpet or other conductive surfaces. To do an A/B comparison between BOOST and NORMAL with the bottom removed – play the unit upside down. DO NOT SET A POWERED UNIT "CONTROLS UP" ON A METAL (or any) SURFACE WITH THE BOTTOM REMOVED!

Congratulations on your choice of MESA/Boogie and welcome to the MESA Family! The same passion for excellence, commitment to quality and dedication to customer satisfaction is present in each and every product we make in our one- and-only shop in Petaluma, California, U.S.A. Rest assured that the very same people that hand-build the finest amplifiers in the world built your pedal and you have access to the same resources for help that all our customers do. Call on us anytime and enjoy!

THROTTLE BOX™

The THROTTLE BOX is all about GAIN. This beast serves up Rock and Metal with cut and aggression but retains the signature warmth and organic sonic quality found in all our instruments. While its main strengths lie in the heavier sounds, the THROTTLE BOX is also versatile and the lower region of the GAIN control should not be overlooked for Classic Rock or howling Blues - both rhythm and lead. The middle range of the GAIN control delivers tight, stinging Modern Crunch with plenty of attitude and percussion. And when you put this pedal to Metal, the upper one-third of the GAIN control unleashes a Heavy Rock hot-rod that's blistering with both gain and searing top-end harmonics.

FEATURES & CONTROLS

IN: This ¼" phono jack is the Instrument Input for the device. Plug the Output of your guitar into this jack with a shielded cable of good quality. The jack is a switching type jack and the circuit is turned on when a cable is inserted. When the circuit is activated by inserting a cable, the internal battery is being used to power it – so be sure to unplug the cable from the INPUT when it's not in use.

NOTE: *The internal battery is switched to an "ON" state (drawing voltage) by a switching element in the INPUT jack. To prolong battery life, disconnect the cable from the ¼" INPUT jack whenever the unit is not in use.*

NOTE: *If you wish to leave the INPUT connected permanently – as in a pedal board scenario – it is advisable to power the unit with an external 9V power supply. When an external (plug-in) AC 9-volt power supply is used to power the unit the DC Receptacle on the pedal automatically disconnects the battery to avoid battery wear and preserve its useful life. If you are going to use external AC power either for long periods or permanently in a pedal board set-up, remove the internal battery to prevent (forgotten) battery corrosion.*

OUT: This 1/4" phono jack is the OUTPUT for the device. Connect the OUTPUT to the Input of your amplifier - or the INPUT of the next device in line in your pedal board.

NOTE: *A Word on Cables… Always use shielded instrument cables of the best quality and shortest length possible when connecting these types of devices. This will minimize degradation of your sound, particularly high frequency roll-off, due to the added capacitance in longer lengths of cable. We recommend no more than 18-20 feet total (Input and Output combined) between your instrument and the termination at the INPUT of the amplifier. If you must use longer cable lengths, you might consider the use of a Buffer or Line Driver to keep the tonal integrity intact. While these change the sound slightly, it will usually be preferable to top end roll-off. And yes – those little 4" interconnects count too, so count them in your cable length.*

LEVEL: This is the master output level and it controls the amount of signal provided to the host amplifier. It can be used either to balance levels to compensate for high GAIN settings - so that no jump in level occurs when switched out of BYPASS. Another application is higher LEVEL settings to purposefully send a hotter signal to the host amp and "slam" the input stage for increased clip, drive or gain.

LO/HI: The LO/HI switch incorporated into the GAIN circuit creates two different gain regions or saturation amounts. LO works great for Crunch or clipped chording and medium gain solo sounds. HI provides an increased level of saturation that is better suited for really heavy Rock / Metal rhythm styles and smoldering single note lead work. Try the LO Mode with the BOOST bypassed for the best balance when searching for lower to mid gain sounds (see BOOST section later in this manual). The balance between low end and top end will be more in-sync and even, making the sound sweeter and more dynamic. Check out the HI Mode with the BOOST engaged for high gain applications where you need thunderous, tuned low-end for Heavy styles.

GAIN: This control determines the amount of gain (overdrive) in the signal path.

Set low (8:00 – 10:30) it produces a range of subtle overdrive that's soft and furry, yet featuring the classic mid-punch associated with these types of circuits. This range is great for pushed and clip-threshold rhythm sounds and to add a slight bump for Blues solo sounds.

The middle range (10:30 – 1:30) offers the most useful region of gain that begins to saturate but still retains a dynamic punch that keeps notes expressive and tight. This works well for both Rhythm and Solo work across many styles of music.

The high range of the GAIN control (1:30 – 5:30) is all about thick saturation. This region will be the obvious choice for extreme Rock, Metal and Heavy styles yet, should not be overlooked for searing sustain in single-note soloing.

MID-CUT: In addition to the standard "blend-type" TONE control, the THROTTLE BOX incorporates a MID CUT control that scoops out the midrange for the classic Boogie "V" EQ curve. This has been an essential ingredient for the many Artists that have employed this powerful tool on our amplifiers for decades to get some of the heaviest sounds around. This control works backwards from what you might be used to with Tone controls. As you increase the control you are increasing the "cut" and cutting out more mids – until at the maximum setting (5:30) there is hardly any midrange left in the signal path.

TONE: This control is found on devices that do not incorporate individual TREBLE and BASS controls. It provides simple, global adjustment of the entire range of frequencies with one control – but your ear may perceive it as most active on the amount of high frequencies present in the mix. A setting of 12:00 represents a "flat" setting with highs neither boosted or cut. Increasing the TONE control past 12:00 boosts a broad band of high frequencies. Decreasing the TONE below 12:00 cuts (rolls off) the same spectrum of high frequencies.

BOOST: Another valuable feature is the selectable BOOST that allows you to further shape the EQ curve to your needs. With the lower cover removed, this black DIP switch is located at the edge of the battery compartment on the lowest circuit board's lower right corner (facing the bottom of the unit and the knobs away from you). Its lever is flush with the circuit board and a slight cutout on the board further identifies it. You may pull the Battery out for easier access to this switch.

Remove the four Phillips-head screws on the Bottom Lid to access the switch - just as you would to replace the battery. Setting the switch to the RIGHT / OUTSIDE (viewed from bottom / knobs away from you) BOOSTS (adds) gain and low end. The unit is shipped from our shop set this way - BOOST engaged. Setting the switch to the LEFT removes the BOOST voice providing a more balanced response.

Heavy, high gain sounds usually benefit from the BOOST position engaged. Low to medium gain sounds can work with both positions, but often benefit from the more tapered and balanced low end of the non-BOOST or normal position.

NOTE: *The unit is shipped from the Factory set to the BOOST position. To remove the BOOST and its increased low end, remove the Bottom Lid and flip the tiny black DIP switch on the lower right edge of the circuit board to the LEFT (NORMAL) position.*

NOTE: *REPLACE THE BOTTOM LID after setting the BOOST switch before using the unit. Some electronic parts inside are static sensitive and can be damaged from even a small static charge from a carpet or other soft surfaces. Always replace the bottom lid after battery replacement or switch adjustment before the unit is used. To do an A/B comparison with the bottom removed – play the unit upside down. DO NOT SET THE UNIT ON A METAL (or any) SURFACE WITH THE BOTTOM REMOVED!*

AC POWER: This standard female DC Receptacle on the pedal is the External Power Supply Jack and it accepts the male plug from a standard 9-Volt "wall-wart" AC power supply. When installing your unit into a pedal board utilizing a universal power supply (multi-output pedal board power supplies), connect the external power source here. The internal battery is automatically disconnected by a switching element in the External DC Receptacle on the pedal. However, if you know you will not be using battery power for an extended period – for example, if you are mounting the unit to your pedal board permanently - it is wise to remove the battery to avoid possible damage from long-term battery corrosion.

INTERNAL BATTERY: This unit can operate on either a 9-Volt battery or a standard 9-Volt "wall-wart" power supply. The unit is shipped from the Factory with a long-life 9-Volt Battery to facilitate easier trial demonstration in a music store environment.

NOTE: *The internal battery is switched to an "ON" state (drawing voltage) by a switching element in the INPUT jack. Disconnect the cable from the ¼" INPUT jack whenever the unit is not in use to prolong battery life.*

BATTERY REPLACEMENT: To access the 9-Volt battery for inspection, replacement or removal; make sure the External Power Jack is disconnected, remove the four Phillips-head screws from the four corners of the bottom lid and remove it. Note the orientation/direction of the battery and terminals and replace it in the same position.

NOTE: *Any type of 9-Volt battery will work in this device if it is fully charged and functional. Carbon Zinc, Alkaline or even Nickel Cadmium Rechargeable type batteries are all acceptable replacements. Some pedal aficionados prefer the "sweetness" they claim to hear from standard Carbon Zinc type batteries, but you will have to decide what type best serves your needs.*

SPECIFICATIONS:

- Dimensions (W/D/H): 2.87" x 4.77" x 2.28" (73mm x 122mm x 58mm)
- Weight: 0.865lbs (393g) with battery, 0.765lbs (347g) without battery
- True Bypass Switching
- Battery Type: 9VDC (one)
- Power Consumption (Current Draw): 9VDC/25mA
- AC Adapter (Optional): Power Jack 2.1mm x 5.5mm, 9VDC with Negative Center (Regulated Recommended)
- Input Impedance: 1M Ohm (500k Ohm minimum)
- Output Impedance: 10k Ohm

SAMPLE SETTINGS:

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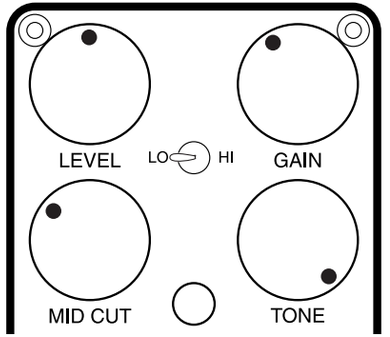
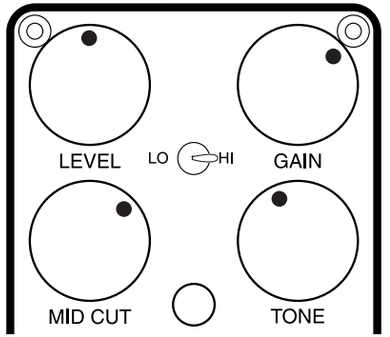


MODERN DRIVE



SAMPLE SETTINGS:

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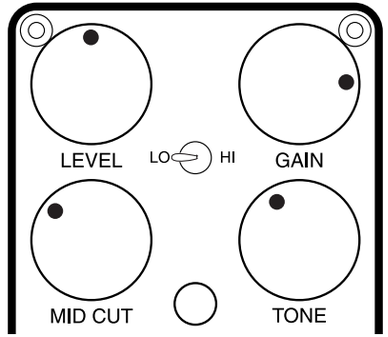
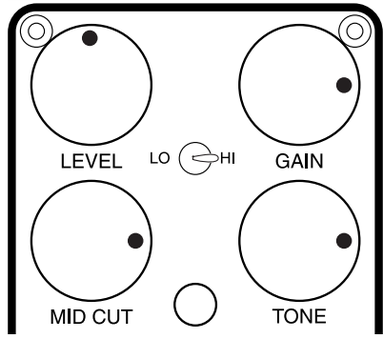


HEAVY GAIN



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